

Alexa Fluor® 488 anti-human CD4

Catalog # / Size: 2187100 / 100 tests
2187095 / 25 tests

Clone: OKT4

Isotype: Mouse IgG2b, κ

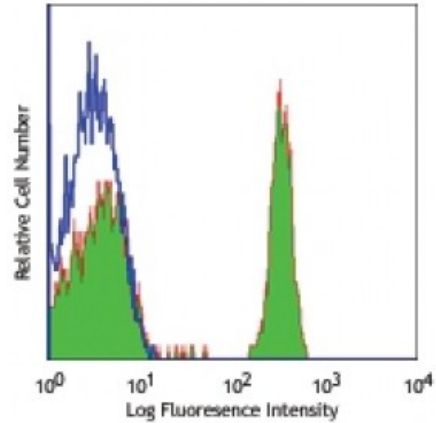
Immunogen: Human peripheral T cells

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific

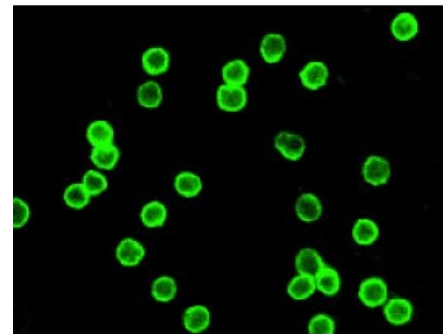


Human peripheral blood lymphocytes stained with OKT4 Alexa Fluor® 488

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Human peripheral mononuclear cells were fixed with 1% paraformaldehyde (PFA), and then stained with 5 microg/ml of CD4 (clone OKT4) Alexa Fluor® 488 for 30 minutes at room temperature. The image was captured by 40X objective.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

Application Notes: The OKT4 antibody binds to the D3 domain of CD4 and does not block HIV binding. Additional reported applications (for the relevant formats) include: immunohistochemistry of frozen sections and blocking of T cell activation. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue. The LEAF™ purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 317404).

- Application References:**
- Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
 - Reinherz EL, *et al.* 1979. *Proc. Natl. Acad. Sci.* 76:4061.
 - Kmieciak M, *et al.* 2009. *J. Transl. Med.* 7:89. (FC) [PubMed](#)
 - Cicin-Sain L, *et al.* 2010. *J. Immunol.* 184:6739. [PubMed](#)
 - Rosenzweig M, *et al.* 2001. *J. Med. Primatol.* 30:36.

6. Linder J, *et al.* 1987. *Am. J. Pathol.* 127:1.
 7. Boche D, *et al.* 1999. *J. Neurovirol.* 5:232. (IHC)
 8. Reinherz EL, *et al.* 1979. *Proc. Natl. Acad. Sci. USA.* 76:4061. (Immunogen)
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Description: CD4, also known as T4, is a 55 kD single-chain type I transmembrane glycoprotein expressed on most thymocytes, a subset of T cells, and monocytes/macrophages. CD4, a member of the Ig superfamily, recognizes antigens associated with MHC class II molecules and participates in cell-cell interactions, thymic differentiation, and signal transduction. CD4 acts as a primary receptor for HIV, binding to HIV gp120. CD4 has also been shown to interact with IL-16.

- Antigen**
- References:**
1. Center D, *et al.* 1996. *Immunol. Today* 17:476.
 2. Gaubin M, *et al.* 1996. *Eur. J. Clin. Chem. Clin. Biochem.* 34:723.